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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,635	02/20/2004	Mitsuyuki Taniguchi	1785.1005	4147
21171 7590 06/18/2007 STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			EXAMINER AURORA, REENA	
			ART UNIT 2862	PAPER NUMBER
			MAIL DATE 06/18/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/781,635	TANIGUCHI ET AL.	
	Examiner	Art Unit	
	Reena Aurora	2862	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 4, 6-7, 8-16 and 18-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4, 6-7, 8-16 and 18-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This communication is in response to amendment received on 03/21/07.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4, 6 – 7, 8 – 16 and 18 – 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al. (4,766,376) in view of Griffen et al. (5,900,727).

As to claims 1, 2, 4 and 6 – 7, Takahashi et al. (hereinafter Takahashi) discloses a magnetic position detector comprising a plurality of signal generating members (M1, M2, M3) for generating mutually different signals; and a signal sensing unit (R11) arranged in close proximity to one selected signal generating member (M3) attached to said rotary body (2), for sensing a signal generated due to a rotation of said signal generating member (M3); wherein said plurality of signal generating members (M2, M3, M4) are respectively formed in such a manner that numbers of signal-cycles and signal-intervals in signals generated during a unit rotation of respective signal generating members are different from each other, while products of said numbers of signal-cycles multiplied by said signal-intervals in said signals are generally identical to each other (col. 3, lines 14 – 41, col. 4, lines 48 – 51 and col. 4, lines 57 - 60) wherein said plurality

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of signal generating members have outer diameters generally identical to each other and inner diameters generally identical to each other (Note fig. 1 and 2). Takahashi fails to disclose any selected one of said signal generating members being able to be attached in an exchangeable manner to a rotary body. Griffen et al. (hereinafter Griffen) discloses a rotary pulse generator kit wherein the signal generating members (24, 24', 24'') being able to be attached in an exchangeable manner to a rotary body (14) (fig. 1 and col. 2, lines 27 - 32). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Takahashi in view of the teachings of Griffen such that attaching the signal generating members in an exchangeable manner to a rotary body would decrease the size of the device and improve the cost of device.

As to claim 8, Takahashi discloses a magnetic position detector comprising a first signal generating member (M3) for generating a first signal, said first signal generating member (M3) being able to be attached to a rotary body (2), and a signal sensing unit (R11) arranged in close proximity to said first signal generating member (M3) attached to said rotary body (2), for sensing said first signal generated due to a rotation of said first signal generating member; wherein said first signal generating member is formed in such a manner that a number of signal-cycles and a signal-interval in said first signal generated during a unit rotation of said first signal generating member is different from a number of signal-cycles and a signal-interval in said second signal generated during a unit rotation of said second signal generating member, while a product of said number of signal-cycles multiplied by said signal-interval in said first signal is generally identical

to a product of said number of signal-cycles multiplied by said signal-interval in said second signal (col. 3, lines 14 – 41, col. 4, lines 48 – 51 and col. 4, lines 57 - 60), wherein said plurality of signal generating members have outer diameters generally identical to each other and inner diameters generally identical to each other (Note fig. 1 and 2). Takahashi fails to disclose the first signal generating member as to be exchangeable with a second signal generating member for generating a second signal different from said first signal. Griffen et al. (hereinafter Griffen) discloses a rotary pulse generator kit wherein the signal generating members (24, 24', 24'') being able to be attached in an exchangeable manner to a rotary body (14) (fig. 1 and col. 2, lines 27 - 32). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Takahashi in view of the teachings of Griffen such that attaching the signal generating members in an exchangeable manner to a rotary body would decrease the size of the device and improve the cost of device.

As to claims 9 – 16 and 18 – 19, Takahashi discloses a magnetic position detector comprising a rotary body (2); and at least two signal generating members (M2, M3), each signal generating member having approximately the same outer diameter (fig. 1) as the other signal generating members and each including a signal generating element having a signal-generation pitch different from the other signal generating members (col. 3, lines 14 – 41, col. 4, lines 48 – 51 and col. 4, lines 57 - 60), wherein the signal generating members each have inner diameters generally identical to each other (fig. 1). Takahashi fails to disclose each signal generating member exchangeably attachable to the rotary body. Griffen et al. (hereinafter Griffen) discloses a rotary pulse

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generator kit wherein the signal generating members (24, 24', 24'') being able to be attached in an exchangeable manner to a rotary body (14) (fig. 1 and col. 2, lines 27 - 32). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Takahashi in view of the teachings of Griffen such that attaching the signal generating members in an exchangeable manner to a rotary body would decrease the size of the device and improve the cost of device.

Response to Arguments

Applicant's arguments with respect to claims 1, 2, 4, 6 - 7, 8 - 16 and 18 - 19 have been considered but are moot in view of the new ground(s) of rejection.

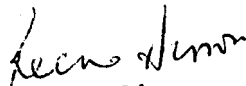
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reena Aurora whose telephone number is 571-272-2263. The examiner can normally be reached on Monday - Friday, 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, E. Lefkowitz can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Reena Aurora


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